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THE TAHITIAN MIGRATION TO HAWAII CA 1100-1300 A.D.: AN ARGUMENT AGAINST ITS OCCURRENCE

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It has long been held on linguistic, traditional and carchaeological grounds that Tahitian-Hawaiian contact occurred in the 12th and 14th centuries A.D. For the last decade, this contact has been viewed as a second "vital" migration to Hawaii from Tahiti, and some claim it radically altered Hawaiian social organisation and internal evolution. These statements have generally been accepted without question, yet this author sees such claims as far from proven. Indeed, at this time there seems to be no good evidence for Tahitian contact ca AD 1100-1300, nor for massive cultural change due to Tahitian migration. This paper will briefly review the historical background for the Tahitian hypotheses and analyse their archaeological, linguistic, and traditional supporting data. Suggestions for future orientation conclude the analysis.

HISTORICAL BACKGROUND

By 1930, E. S. C. Handy (1930a: 8; 1930b: 24) had postulated that a migration of Tahitian chiefs had arrived in Hawaii conquering a menehune population which had settled there previously. Handy gives no dates to his "arii" migration and bases his Hawaiian conclusions solely on traditions. Using Hawaiian traditions, P. H. Buck (1938: 252-5; 1945: 14) also claimed Hawaii was settled by the same two groups as Handy had -- (1) the menehune who settled early from Eastern Micronesia and brought no livestock or crops and (2) chiefs from Tahiti which brought the more complex Tahitian culture ca A.D. 1100. In the late 1940's and the 1950's, K. P. Emory (1959) added linguistic and archaeological data to reject the idea of an earlier menehune migration and to suggest the Tahitian chiefs noted by Buck and Handy initially settled the islands ca A.D. 1000 A.D. Emory dated settlement to this time on the basis of linguistic separation of at least 1,000 years, genealogies which began between the 12th and 14th centures A.D. (based on 30-40 generations at 25 years per generation), and carbon-14 dates of A.D. 1000 + 180 (from 01) and A.D. 957 + 200 (from the Ha site)

(Emory 1959: 29-30). His linguistic evidence was founded on Swadesh based word lists in which Hawaii and Tahiti had the highest percentage of shared words (88% on 100-word list and 76% on 200-word list) (Ibid.: 32-3; 1963: 85, 89). Traditions of voyages to Kahiki supplied the genealogical dating (Emory 1959). Archaeologically, Emory (1928, 1943) had long claimed similarities between Tahitian and Hawaiian temple types. In addition, adzes recovered from 01 and H1 seemed to be similar to types found only in Tahiti (Emory 1959: 30).

In a 1961 paper published in 1963 (Emory 1963), Emory reiterated Hawaii was settled directly and solely from Tahiti based on covarying glottochronological dates and archaeological carbon-14 dates of that time (Ibid.: 93-4). By 1963, various archaeological finds (e.g., Maupiti in the Societies, and Hl in Hawaii) had forced Emory to change his viewpoint slightly in the article. In a postscript added prior to publication, he now stated (Emory 1963) that initial occupation of Hawaii was from the Marquesas. However, the linguistic sharing between Hawaii and Tahiti, temple type similarities, the appearance of later Tahitian fishhooks in Hawaiian sites between A.D. 1100-1300, and the Hawaiian voyaging genealogies dated to A.D. 1100-1300 still suggested to him a second settlement of Hawaii between A.D. 1100-1300 from Tahiti (1963: 97).

In 1964, Sinoto and Emory more rigidly defined the Tahitian migration to Hawaii. At Maupiti in the Society Islands, they recovered a Tahitian one-piece fishhook with a certain line-attachment type, dated to less than A.D. 1350 (Emory and Sinoto 1964: 158). This Tahitian one-piece fishhook line-attachment type

"... appears in cultural deposits in Hawaii dating circa A.D. 1200-1300. Once it made its appearance in Hawaii, this form quickly supplanted the earlier forms... The implication here is that the pattern of this historic Tahitian head-form along with its form of trolling-hook point, was carried to Hawaii from the Society Islands at a later period in both Tahitian and Hawaiian history..."

(Emory and Sinoto 1964: 158-9).

Traditional and linguistic evidence is reiterated also (<u>Ibid</u>: 159). In addition, they tend to suggest that this Tahitian influence brought other major changes to Hawaii.

"The fact that Hawaiian culture in its elaboration of political organisation, temple forms and religious rituals is much closer to Tahitian culture than either Maori or Marquesas indicates a powerful influence from the Society Islands..."

(Emory and Sinoto 1964: 159).

In 1966 R. Green felt high Hawaiian-Tahitian lexicostatistic scores suggested contact at some point, although he postulated Hawaii was settled first from the Marquesas (Green 1966). He notes Emory's linguistic and traditional claims for Tahitian chiefs arriving ca A.D. 1100-1300, but notes that "their influence and their presence" has to be established archaeologically. Green (1966: 30) states such "Supporting archaeological evidence has been obtained for this theory" and lists the "rapid change" to the above-noted Tahitian form of fishhook in H2 and H8's upper levels on Hawaii Island after A.D. 1550 and in K3 on Kauai ca A.D. 1300-1400. As the K3 change was earlier, Green concludes

"... it may be that they (the Tahitians) were able to establish themselves first at the Kauai and outlying islands end of the Hawaiian chain and their influence spread from there, resulting eventually in fusion with dominance of the later and intruding Tahitian culture."

(Green 1966: 30).

Emory (1968: 167) has since added adze butt angle similarities and quoit design similarities to the archaeological list and dropped temples temporarily due to lack of chronological placement of types in Hawaii or Tahiti (Emory 1970: 87-90). Sinoto (1962, 1967, 1968, 1970) has continued to emphasise fishhoook relationships as evidence for contact migration. In sum, contact is assumed to be proven by linguistic percentages and their dating, Hawaiian traditions of voyages and their dating, and dated similarities in fishhooks, adzes, adze butt angles, and quoits recovered archaeologically. Handy (1930a, 1930b), Buck (1938), and Emory and Sinoto (1964) have also concluded that this contact explains the complex stratification situation at contact in Hawaii by introduction of Tahitian institutions and items.

ANALYSIS

These ideas of Tahitian contact have been widely accepted with little question in Polynesian archaeology. Recently, Bellwood (1970: 100) has disagreed that major change resulted, but he accepts contact based on the above archaeological, traditional and linguistic data. Goldman (1970: 202-211) tends to reject contact-initiated major changes and

discredits the claim that the voyaging traditions record external migrations, yet he accepts contact based on linguistic data. This author has queried since 1971 whether contact occurred (much less major change), feeling no archaeological, linguistic, or traditional data supported the claim (Cordy in press, 1973, NDa, NDb).

For contact to be proven, supportive data must be collected and must indicate chronological contemporaneity ca A.D. 1100-1300. When a close look at the hypotheses for Tahitian settlement in the 12th and 14th centuries A.D. is taken, much of the supportive data fails to prove the hypotheses.

Hawaiian traditions of constant voyaging to Kahiki were the original basis for the Tahitian hypotheses. These traditions appear only in the early period of the genealogies (cf Fornander 1969, II: 6-66), dated by Emory to ca 1100-1300 A.D. (based on 25 years per generation). Several problems occur when using these traditions as evidence. First, dating traditions is extremely hazardous and unreliable. Suggs (1960; 1961: 174) vividly illustrates this with Marquesas data, and Piddington (1956) also has noted the problem. Historical evidence of genealogical alterations by new leaders (cf Barrere 1961), the variable length of reigns, and the succession of deceased rulers by brothers and not the next generation makes average rates far from valid. Secondly, the Hawaiian voyaging traditions appear to be couched in fiction and thus questionable as records of whether any voyaging to Tahiti ever occurred. voyagers are the first "real" individuals to whom the Hawaiian chiefly lines traced their origins (earlier individuals being mythological cf Fornander 1969, I), and voyages only occur in this early period of Hawaiian oral history. Details on each individual are sparse, and much of the stories include miraculous feats and adventures (e.g., Hema killed in Kahiki by a large mythical bird of Kane) (Fornander 1969, II: 16). Their voyages back and forth to Tahiti seem an easy and almost constant visitation with each canoe arriving safely at its destination (Ibid., II: 35-6, 50-64). This appears fictionalised, for even the authors who admit the possibility of Hawaii-Tahiti two-way voyaging state it was not an easy voyage and would incur a high disaster rate (Dening 1961; Finney 1967).

The voyages refer to <u>Kahiki</u> (cf Fornander 1969, II; Cartwright 1933) which is not necessarily Tahiti. <u>Kahiki</u> (as Upolo, Hawaiki, etc.) is a frequent word in Polynesian traditions referring to ancestral lands (cf Fornander 1969, II; Sharp 1964: 81). In the Hawaiian case, Fornander (1969, II: 50, 57) (who worked on compiling

and analysing the Hawaiian traditions ca 1880 in a degree perhaps unequalled since) states the word Kahiki seems to refer to a general "foreign lands" which could consist of "any and every group from Easter Island to the farthest west..." It could be noted in analogy to the New Zealand Great Fleet case (cf Simmons 1969: 7; Groube 1970; Bellwood 1970: 100) that Kahiki may be referring to a location within the Hawaiian Islands. Goldman (1970: 205, 207, 211) has suggested this position, and this author also tends to feel that may be the case, for the voyagers themselves are noted to be chiefs based on different islands (e.g., Laamakahiki and Olopona on Oahu and Moikeha and Kila on Kauai) (Fornander 1969, II: 49, 54-5). Also the voyaging era (when analysed in the traditions of Oahu Island) is marked by newly emergent stratified, two-chiefly redistribution level political systems (Cordy NDb). Thus, the voyaging traditions may be accounts of the upheaval in this time of political organisational Detailed analysis of traditions and archaelogical testing of patterns along the lines of Groube (1970) must be done to corroborate such speculations. As to the traditional Hawaiian directions to Tahiti and the place names in Hawaii (e.g., Kahikinui division on Maui and Ke Ala-i-Kahiki channel) ... The place names could have equally been given by the first settlers in the Hawaiian Islands (whether from Tahiti or not). In sum, the dating of the genealogies is unacceptable as scientific proof, and even the essential claim that the genealogies report actual Tahitian contact is guestioned.

Linguistic data has been seen as the firmest basis for the hypotheses. Elbert (1953), Emory (1946, 1959, 1963) and Green (1966) all note high Hawaiian-Tahitian lexocostatistical scores. Green (1966: 18) suggests Hawaii's closest linguistic relations are with the S.E. Marquesas grouping, and he (1966 and Emory (1963) postulate secondary Tahitian contact and language mixing. This author, however, feels Eastern Polynesian language relations are still far from certain. Green (1966: 10) shows Emory's methodology to have been in error leading to too high sharing percentages among languages. Emory (1963: 99-100) correctly sees secondary language mixing as difficult to analyse, and Biggs (1972) has recently further pointed out a few of these linguistic problems.

Use of glottochronological dating to document language fissioning has been used to substantiate A.D. 1100-1300 Tahitian arrivals. Elbert (1953: 161) however, noted Tahitian word tabuing led to rapid changes and thus "seems to nullify the usability of glottochronological method as far as Tahiti is concerned..." Emory (1963: 94) postulated

the following dates for Tahitian arrivals: A.D. 504 (100-word list), A.D. 517 (200-word list), and A.D. 250 (total vocabulary comparison). But, with the Maupiti discoveries, Emory placed Tahitian arrivals after an early Marquesan migration, and being unable to reconcile archaeological dates and glottochronological dates for reputed Tahitian contact, abandoned glotoochronology (<u>Ibid</u>.: 99). This leaves the Tahitian migration dating standing only on archaeological dating.

But the archaeological data for Tahitian settlement in the 12th to 14th centuries is also questionable. As mentioned above the temple type similarities cannot be used as evidence due to the lack of types' placement chronologically in other Polynesian areas and in Hawaii (cf Emory 1970: 87-90). In 1968 Emory (1968: 167) claimed later adze butt angles in Hawaii were not like those of Marguesan adzes and therefore must be the result of later influence from the Society Islands". It seems to this author adze butt angles' change could also be due to factors such as size, function, local style rather than diffusion. Nevertheless, Emory's analysis includes a lumped sample of adzes from early sites, late sites, and surface collections; dating is unnoted; and more disturbing, no temporal patterns of change or variation are In sum, change is not shown, and the analysis does not Adze shapes are commonly the mode of comparison of seem convincing. origin areas in Polynesia, and Hawaiian adzes of the post-A.D. 1100-1200 era are remarkably uniform (tanged quadrangular) (Emory 1968) and unlike the type then found in Tahiti (Duff Type 3A) (Bellwood 1970: 100, 101). The Hawaiian quoits, noted by Emory (1968: 167, Fig. 2) to be concrete evidence of "powerful Tahitian influence" consist in published form to be one quoit (BM B 8639) with no site location, no provenence, and no date (the same is true of the one Tahitian comparitive specimen); this cannot be accepted in present form as concrete evidence of contact.

The remaining archaeological evidence (which is published) is a Hawaiian one-piece fishhook head-attachment attribute (HT4) which was present in Tahiti after A.D. 1350 and reputedly was introduced by Tahitian contact ca A.D. 1200-1300 and rapidly became the main line-attachment form (Emory and Sinoto 1964: 158). Sinoto's histogram (1962: 164), however, shows this head type was present in very small numbers in the bottom level of one of the earliest sites yet found in the Hawaiian Islands (Level II of H8 which dates from ca A.D. 750 - Emory and Sinoto 1969) which suggests the early presence of HT4 as a minor type. The HT4 type also appears in quite small numbers in layers II and III of H1 which dates after A.D. 1250 (Green 1971: 175), and it never became popular at H1 (Sinoto 1962: Fig. 2). At H8 the HT4 type remains minimal in popularity until A.D. 1300-1400 (Green 1971:

172) when it gradually began to become popular. In K3, where Green (1966: 30) says the HT4 type appeared earliest and change occurred the fastest, the earliest layer (III) is dated ca A.D. 1389 and contains HT4 as a minor type (Sinoto 1962: Fig. 2). In K3 this type gradually becomes popular in later layers (Ibid.: Fig. 2). In sum, HT4 appears in some of the earliest Hawaiian sites (H8), remains a minor type until at least after A.D. 1400 in H1, H8 and K3, and then gradually becomes a major type.

The above analysis, thus, suggests the following: (1) Linguistic connections are far from clear. Glottochronological dating is questionable and does not give A.D. 1100-1300 dates but A.D. 200-500 dates. (2) Traditional data is unreliable for dating purposes. Also it is highly fictionalised and may represent internal events rather than Tahitian contact. (3) Finally, archaeological data completely fail support Tahitian contact at the stated time period. In sum, Tahitian contact in A.D. 1100-1300 is not supported, and the claim for major cultural change from Tahitian contact in A.D. 1100-1300 is also unsupported.

CONCLUSIONS

This analysis does not claim Tahitian contact did not occur in A.D. 1100- 1400 or at any other time in the Hawaiian Islands; it simply claims that at this time no supportive data exists. Therefore, the theories of Tahitian contact should become hypotheses which must be The statements that Tahitian contact explains a major change in Hawaiian cultural evolution (stratification) are equally invalid at As an aside, it should be noted that if such migration is to remain an explanatory hypothesis to be tested, the hypothesis must be altered, for even if massive material culture change as a result of Tahitian introductions is recovered archaeologically, this is not an explanation of change but only a description. Why the migrants were successful in establishing their culture must be included in the hypothesis and proven by archaeological testing. Binford (1968) has discussed this in detail in relation to Sabloff's and Willey's (1967) Mayan paper.

Before concluding, this author would like to suggest that migration need not be the only means of explaining artifact or major cultural changes in Hawaii. Artifact changes and variations in geographical distributions can be due equally to local adaptation and other factors. For major changes, Suggs (1960: 160) has noted in passing that factors internal to the Hawaiian Islands could be just as feasible, and

Goldman (1970) sees internal status rivalry as just this factor. The author elsewhere (Cordy in press, NDa, NDb) has analysed the major changes in Hawaiian prehistory and attempted to begin to explain in detail the origin of stratification by using a general systems theory approach and looking at a variety of systemic inputs (among them Tahitian migration) and of cultural system readjustments. In that analysis population pressure was opted for as the initiator of stress which leads to stratified societies formed through warfare or internal social organisation change. In conclusion, all possible explanatory hypotheses of cultural change should be analysed, but before hypotheses are accepted, valid testing with valid data must take place. That has been the flaw in the Tahitian hypotheses discussed here.

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